

AMENDED SHEET

CLAIMS

1. A particulate composition of matter for use as a vehicle for introducing biocides into liquid-based media comprising porous inorganic carrier particles having biocide adsorbed within the pore system thereof and having a retention factor (as defined herein) of at least 0.6.
2. A composition as claimed in claim 1 in which the retention factor is at least 0.8.
3. A composition as claimed in claim 1 or 2 in which the particles carry at least 30% by weight of biocide solution.
4. A composition as claimed in any one of claims 1 to 3 in which the particles have an activated micropore system.
5. A composition as claimed in any one of claims 1 to 4 in which the particles have a pore area of at least 25 m²/g in the pore size range of from about 20 to about 50 Angstroms.
6. A composition as claimed in any one of claims 1 to 5 in which the particles have a BET surface area of at least 200 m²/g.
7. A composition as claimed in any one of claims 1 to 5 in which the particles have a BET surface area of at least 300 m²/g.
8. A composition as claimed in any one of claims 1 to 7 in which the particles have a biocide adsorption capacity of at least 10% by weight.
9. A composition as claimed in any one of claims 1 to 8 in which the particles are constituted by amorphous silicas, Y-zeolites or dealuminated Y-zeolites, or a mixture of two or more of these materials.
10. A liquid-based medium incorporating a particulate composition as claimed in any one of claims 1 to 9.
11. A surface coating formulation incorporating the particulate composition as claimed in any one of claims 1 to 10.
12. A formulation as claimed in claim 11 in the form of a paint or lacquer.
13. A formulation as claimed in claim 11 in the form of a water-based or organic solvent-based paint.
14. A surface cleaning formulation incorporating the particulate composition as claimed in any one of claims 1 to 9.
15. A sealant formulation incorporating the particulate composition as claimed in any one of claims 1 to 9.
16. A tiling, grouting or cement-based formulation incorporating the particulate composition as claimed in any one of claims 1 to 9.
17. A mud drilling formulation incorporating the particulate composition as claimed in any one of claims 1 to 9.

18. A method of producing a biocidally-protected formulation comprising one or more components and a biocide, in which the biocide is introduced into the formulation by means of a particulate composition as claimed in any one of Claims 1 to 9.

19. A method as claimed in claim 18 in which the biocide is an isothiazolone or derivative thereof or a mixture of isothiazolones and/or derivatives thereof.

20. A method as claimed in claim 18 or 19 in which the particles used are effective to reduce degradation of the biocide to such an extent that at least 60% of the biocide is detectable when the biocide-containing particles are subjected to UV exposure and/or thermal ageing for 40 days under the conditions defined hereinbefore.

21. A method as claimed in any one of claims 18 to 20 in which the particles used are effective to reduce degradation of the biocide to such an extent that at least 80% of the biocide is detectable when the biocide-containing particles are subjected to UV exposure and/or thermal ageing for 40 days under the conditions defined hereinbefore.

22. A method as claimed in any one of claims 18 to 21 in which the biocide comprises 2-n-octyl-4-isothiazolin-3-one.

23. A method as claimed in any one of claims 19 to 21 in which the biocide comprises 2-methyl-4-isothiazolin-3-one and 5-chloro-2-methyl-4-isothiazolin-3-one.

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